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(54) Title: METHODS OF KILLING NEMATODES COMPRISING THE APPLICATION OF A TERPENE COMPONENT

(57) Abstract: There is disclosed method of killing nematodes comprising the step of applying an effective amount of a nematicidal composition comprising a terpene component and compositions suitable for use in the method. The terpene component is preferably in association with water, either as a solution or a suspension. An excipient may also be included, which is suitably hollow glucan particles which encapsulate the terpene component.

INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 A01N35/02 A01N25/28 A01N35/06 A01N35/04 A01N31/16
 A01N31/08 A01N31/04 A01N31/02 A01N27/00
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According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A01N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 049 828 A (COLE ET AL) 20 September 1977 (1977-09-20)	1-3, 7, 8, 12-14, 16, 17, 36, 38, 56-58
Y	abstract claim 6 column 1, line 47 - line 52 -----	1-58
X	DATABASE WPI Section Ch, Week 198026 Derwent Publications Ltd., London, GB; Class C03, AN 1980-45625C XP002335785 & JP 55 064736 A (YOSHIDA T) 15 May 1980 (1980-05-15)	1-3, 7, 17, 36, 38, 56-58
Y	abstract ----- -/-	1-58

 Further documents are listed in the continuation of box C. Patent family members are listed in annex.

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Date of the actual completion of the international search

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PCT/GB2005/000240

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 662 915 A (OKIOGA ET AL) 2 September 1997 (1997-09-02) abstract column 1, line 56 - line 66 column 2, line 37 - line 39 column 3, line 2 - line 28 ----- EP 1 106 070 A (INABONOS, S.A) 13 June 2001 (2001-06-13) abstract page 3, line 42 - line 53 ----- US 4 032 551 A (WILLETT ET AL) 28 June 1977 (1977-06-28) abstract column 2, line 18 - line 21 column 2, line 32 - line 48 column 4, line 60 - line 68 ----- US 4 743 620 A (HODGIN ET AL) 10 May 1988 (1988-05-10) abstract column 3, line 34 - line 35 column 4, line 31 - line 34 claim 1 ----- US 6 534 078 B1 (STRZEMIEMSKI THOMAS M ET AL) 18 March 2003 (2003-03-18) column 2, line 10 - line 12 column 2, line 57 - line 65 claims 2,3,12 ----- WO 03/020024 A (XIMED GROUP PLC; FRANKLIN, LANNY, U) 13 March 2003 (2003-03-13) cited in the application abstract page 25, line 23 - line 29 page 22, line 4 - line 11 example 8 ----- EP 0 242 135 A (AD2 LIMITED; AD2 LTD) 21 October 1987 (1987-10-21) abstract page 3, line 5 - line 13 page 4, line 7 - line 12 examples ----- GB 2 162 147 A (* DUNLOP LIMITED) 29 January 1986 (1986-01-29) abstract -----	1-3,36, 38,56-58 1,7,56, 57 1,5,56, 57 1,2,5,7, 17,36, 38,56-58 1,2,5,7, 17,36, 38,56-58 1-18, 36-38, 56-58 19-35, 39-55 19-35, 39-55

INTERNATIONAL SEARCH REPORT

PCT/GB2005/000240

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WO 96/36433 A (CPC INTERNATIONAL INC; HOBSON, JOHN, CHARLES; GREENSHIELDS, RODERICK,) 21 November 1996 (1996-11-21) abstract -----	19-35, 39-55
Y	EP 0 460 945 A (MITSUBISHI PAPER MILLS, LTD; KIRIN BREWERY COMPANY LTD) 11 December 1991 (1991-12-11) abstract -----	19-35, 39-55

INTERNATIONAL SEARCH REPORT

PCT/GB2005/000240

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
US 4049828	A	20-09-1977	DE GB JP FR	2534765 A1 1513777 A 51041424 A 2318585 A1	19-02-1976 07-06-1978 07-04-1976 18-02-1977
JP 55064736	A	15-05-1980		NONE	
US 5662915	A	02-09-1997		NONE	
EP 1106070	A	13-06-2001	ES BR EP MA US	2163999 A1 0005587 A 1106070 A2 25218 A1 6482455 B1	01-02-2002 07-08-2001 13-06-2001 02-07-2001 19-11-2002
US 4032551	A	28-06-1977	US DE FR GB IT JP NL	3956485 A 2506271 A1 2260953 A1 1457098 A 1031772 B 50116635 A 7501791 A	11-05-1976 21-08-1975 12-09-1975 01-12-1976 10-05-1979 12-09-1975 19-08-1975
US 4743620	A	10-05-1988	US	4616036 A	07-10-1986
US 6534078	B1	18-03-2003		NONE	
WO 03020024	A	13-03-2003	BR EP WO US	0212163 A 1420640 A2 03020024 A2 2004248764 A1	07-12-2004 26-05-2004 13-03-2003 09-12-2004
EP 0242135	A	21-10-1987	CA DE EP US	1301682 C 3763513 D1 0242135 A2 5288632 A	26-05-1992 09-08-1990 21-10-1987 22-02-1994
GB 2162147	A	29-01-1986		NONE	
WO 9636433	A	21-11-1996	AT AU AU CN DE DE EP WO HK JP US	180416 T 695215 B2 5403896 A 1184438 A ,C 69602606 D1 69602606 T2 0844909 A1 9636433 A1 1018026 A1 11505471 T 5798252 A	15-06-1999 06-08-1998 29-11-1996 10-06-1998 01-07-1999 23-09-1999 03-06-1998 21-11-1996 27-06-2003 21-05-1999 25-08-1998
EP 0460945	A	11-12-1991	JP JP JP JP JP DE	1996954 C 4063127 A 7032871 B 2111654 C 4117245 A 8032225 B 69113682 D1	08-12-1995 28-02-1992 12-04-1995 21-11-1996 17-04-1992 29-03-1996 16-11-1995

INTERNATIONAL SEARCH REPORT

PCT/GB2005/000240

Patent document cited in search report	Publication date		Patent family member(s)	Publication date
EP 0460945 A			DE 69113682 T2 EP 0460945 A2 US 5521089 A	21-03-1996 11-12-1991 28-05-1996